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ABSTRACT

Evaluation roles used in the Department of Research and Development in the Cincinnati Public Schools are identified and described. These include: project evaluator, local-school evaluator, independent program evaluator, external evaluator and external auditors. The merits of each evaluation role will be discussed as to its relationship with credibility, objectivity, independence and usefulness. The basis for judging the merits of each evaluation role with regard to the above four criteria will be: (1) types of decisions to be made; and (2) safeguards to maximize each of the four criteria. (Author/RC)



SPECTRUM OF OBJECTIVITY - CREDIBILITY IN EVALUATION

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Purpose

This paper will identify and describe the evaluation roles used in the Department of Research and Development in the Cincinnati Fublic Schools.

These include: project evaluator, local-school evaluator, independent program evaluator, external evaluator and external auditor. The report will discuss methods used to assure an appropriate level of objectivity to the findings.

Background

The issue of objectivity in evaluation is so central to the process itself that many discussions of it are shrouded in defensive language. The final act of placing value, whether performed by the decision-maker or by the evaluator, extends beyond the fringes of method into the realm of decision-making itself. The denial of this subjective element—or at least the attempt to bury it in jargon—is a major reason for much of the turgia prose about evaluation. The scientific method contains subjective elements of the same sort (Kaplan, 1964), which are often buried in the research literature.

The "evaluation as research" proponents (Suchman, 1967) offer objectivity in the form of experimental controls and appropriate data analysis. Others suggest that the presence of a sound basis in theory is a desirable characteristic of evaluative research (Bernstein, 1973). These "scientific" procedures act to reduce bias, but do not guarantee that the findings are either useful or even "true" (House, 1972).



Reliance on research methodology has been identified as a major cause of irrelevant evaluation reports (Stufflebeam et.al., 1971).

The "evaluation as information" proponents (Stufflebeam et.al., 1971) accept "usefulness" and presumably "true" as the primary concern of evaluation. Pre-ordinate concern of utility evaluation is the creation maintenance of credibility by the evaluator.

Opposing sets of values held by various "stakeholders" in a project can effect the credibility of "informative evaluations" which pass through many hands (Johnson, 1971). The credibility of internal evaluations can be increased by an external availt of the results (Kniefel, 1971). In some cases internal "independent" evaluators are suggested as a balance between objectivity and usefulness (Papay and Costello, 1974). This balance can be affected by the type of decision being made and the evaluation budget.

Assumptions and Definitions

Given a choice, every evaluator would prefer to produce objective, independent, credible and useful evaluations. However, it is an assumption of this paper that the safeguards an institution can apply in practice cannot maximize all the above characteristics at the same time.

Independence is defined as the autonomy of function the evaluator is given within organizational contexts. It is a guarantee that evaluation in design, direction, and interpretation is free from interference, subjection and influence. The evaluator's independence requires exemption from both control and support. In other words, an extremely independent evaluation may be similar to an adversary evaluation. The goal free evaluation described by Scriven approaches this independent ideal.

In organizational contexts, independence involves the explication of those assumptions and a reporting relationship which insures freedom from subjection and influence. These factors, as part of the evaluator's role



definition, delimit the guaranteed independence of an evaluator from the viewpoint of the organization within which he operates. The characteristics of independence as it applies to the evaluator's role in a definition may not be the same in actual practice. When conflict arises, the evaluator selects the alternative which is more reality based. Personal independence, expertise and experience, while valued in theory, do not always safeguard the independence of evaluation activities.

Credibility represents the quality of trust that is established between the evaluator and the user of evaluative information. Beyond the scientific criteria of evaluation data, the user needs to be able to trust the evaluator in order to make use of the data. For this reason it is an assumption of this paper that credibility can be maximized only by a high degree of mutual trust between the evaluator and the specific management level for which the evaluation results are targeted.

In organizational terms, credibility can be safeguarded by requiring pre-specification of mutually agreeable outcomes by the appropriate management level and by allotting sufficient time and effort to develop mutual understanding. The more commensurate the outcomes and understandings are within some methodolical viewpoint, the more likely the results will be thought of as credible.

As you will note, independence is difficult to maximize in conjunction with credibility. If the role and viewpoints of the evaluator are in conflict with the viewpoints and assumptions of the user or a management personnel, these conflicts need to be solved through deliberate efforts to establish a working relationship between the two. However, the very effort can easily destroy the independence of the evaluator.



Objectivity is defined in this paper as validity and reliability of evaluation information. It is our contention that this has been a traditional criteria for judging the soundness of research and evaluation. The attempt to guarantee objectivity in evaluation is not only a design problem but also selecting the best design which can fit the program in the field. More often the evaluator is confronted with the selection of the most objective methodology which can be applied, given the operational details of the treatment.

Objectivity is safeguarded by prespecification of those aspects of behavior which will be measured. This includes a systematic procedure for observation. The objectivity of evaluation results will then be limited by the methodology chosen for a particular evaluation.

<u>Usefulness</u> represents the degree to which evaluation results are used. Since the user of evaluation information is most often someone other than the evaluator, it is difficult for the evaluator to insure usefulness of data. The evaluation information must address itself to a specific management level which will use the information.

Usefulness can be safeguarded by insuring that evaluators and management personnel have the time to arrive at agreement about the outcomes to be used. Usefulness requires that project decision making and project operation build a mechanism for evaluation feedback and subsequent modifications. Evaluation must be flexible enough to answer meaningful questions which arise at different stages of a project. Highly credible, and objective answers to the wrong questions are not useful. Highly useful data sometimes are not lighly objective.

The safeguards which insure independence and credibility are much concerned with the relationship between the evaluator and the user, and the role definition of the evaluator within an organization. The safeguards



which insure objectivity and usefulness are concarned with the quality of data provided and the responsiveness of the data to the particular project's needs.

Thus far, we have defined the four criteria--independence, credibility, objectivity, and usefulness--and explained the underlying assumptions. Our assumption is, again, that these criteria cannot be safeguarded within a single evaluator's role nor can they be maximized at the same time.

For the purpose of this paper, we have developed a matrix showing the evaluator roles on one side and the four criteria on the other side. Then each role is rated as high, medium or low in terms of independence, credibility, objectivity, and usefulness.

It should be reminded that independence and credibility criteria are related more to the evaluator's relationship with the user, while objectivity and usefulness concern more with the quality of data provided. The ratings of each role are presented in Figure 1.

Figure 1. Ratings of Independence, Credibility, Objectivity and Usefulness for Five Evaluator Roles.

Criteria Roles	Evaluator Related		Data Related	
	Independence	Credibility	Objectivity	Usefulness
Project Evaluator	Low	Medium High	Medium Low	Medium High
Local School Evaluator	High Medium	Medium High	High Medium	High
Independent Program Evaluator	High	Medium	High	Medium
External Evaluator	High	Medium	High	Medium
External Auditor	High	Medium	High	Medium



The ratings do not represent the relative importance placed on the criteria, but rather the characteristics that have been safeguarded. Those safeguards are more or less built into the evaluator's role which may be commonly found in a large school system.

In the discussion section we will define each of the evaluator roles which have been used in Cincinnati Public Schools. The definition of roles includes major decision types the evaluator deals with. The decision types are the kinds of questions the evaluator must answer in order to fulfill information requirements during different stages of program development and operation.

The types of questions the evaluator may deal with include the following:

- 1. What is the problem--needs assessment?
- 2. What strategy is appropriate --- input evaluation?
- 3. Is the project operating as planned--process evaluation?
- 4. Did it meet its objectives--output evaluation?
- 5. Should we continue or discontinue the project--impact evaluation?

The discussion which follows next will explain this further for each evaluator role and describe how the ratings of criteria illuminate meanings into operational contents.

Discussion

The discussion section of the paper includes the interaction of the various evaluator's roles, the major emphasis with regard to objectivity, independence, credibility and usefulness and how these are altered by the stage of the project. It also includes the safeguards the system has built into each role with regard to objectivity, independence, credibility and usefulness.

Project Evaluator. The project evaluator in the Cincinnati Public

Schools conducts evaluation of developmental and innovative projects

(basically Title III, E.S.E.A.) and reports directly to the project coordinator.

The roles this person plays at various stages of the project are varied.



During formulation of the project, the principal role of an evaluator is to help the program planners to approriately define their objectives, and to formulate criteria for the assessment of the objectives. However, the evaluator who does this is usually not the person who ends up being the project evaluator, since we are applying for a grant during the formulation stage.

The evaluator should be instrumental in having evaluation built into the program design so that the evaluation requirements are a recognized and accepted aspect of the program operation, —ther than sup rimposed and in conflict with other operations. Again, it should be noted that the project evaluator has usually not been involved during these stages and must accept, for the most part, what was written into the grant application.

During implementation and operation of the project, the evaluator serves to provide process and product information to the project staff, on the basis of which the project may be modified. This function constitutes serving as a change agent or connective feedback loop in the development of the project. Purposes and objectives may be refined and modified as a result of the feedback, as well as features of the project operation.

We use a project evaluator in our Title III programs because we feel that as a member of the project staff, this person will be regarded as knowing and appreciating the nature of the project, as being accepted by the rest of the staff and as being able to operate with little disruptive influence. Since these projects are developmental in nature, we feel that it is a necessity that such a position be available within each project. However, we do note that by virtue of this person's intimate involvement with the program, he/she may be unable to interpret findings in an appropriate perspective, thereby limiting the objectivity of the evaluation.



However, if a good working relationship does exist within the project, the evaluator's credibility and the usefulness of the data will be high. Therefore, the independence factor is low with regard to the project evaluator. We have chosen to accept the loss of independence since the credibility factor will increase with the evaluator serving as part of a team. The project evaluator thus becomes a staff member reporting to the project coordinator with an expertise in evaluation as opposed to a staff member with expertise in media.

Post-project functions of the evaluator include the comparison of endproducts with the stated goals to assess the degree of success and then
furnish information to decision-makers as to what might be expected should the
project be continued, expanded or replicated.

Here, the usefulness of data will be very high since the project evaluator has been intimately involved with the project. Also, the objectivity of the data should be high since many of the objectives were already set up before the project evaluator was employed and it was up to the evaluator to collect the data to measure their pre-determined objectives. However due to the intimate involvement, the objectivity may be somewhat compromised.

In most cases, decisions of a go-no-go nature are based on the financial situation of the school board. Yet, among those programs competing for funds, those which have more defensible results will be considered in a better light. Here, the project evaluator is seen as an "expert" in evaluation and is considered to be independent from the mainstream of activities within the regular school curriculum.

In projects, many times the objectives are project-based and do not give the impact-type and generalizability of data which people sometimes need for go-no-go decisions.



Local School Evaluator

The local school evaluator (LSE) in the Cincinnati Public Schools provides evaluation services to local schools and works directly with the principal and the staff of a school. Since a school program is broader in scope and more routinized in activities than a single project, the type of questions the local school evaluator deals with are very diverse.

During the stage when a problem is not clearly defined, the role of the local school evaluator is to help a school staff identify the area of need for that particular school. A starting point is usually the examination of existing data within the school system. This includes test data, survey data, and data such as attendance and mobility from a computerized central file. This enables a school to verify their perceived needs and quite often identify new areas of need. The local school evaluator's major emphasis is on this stage. During this stage the local school evaluator can provide a perspective which may be more objective and data-based than the school personnel. The local school evaluator's role at this time maximizes the objectivity of the data and the independence of the evaluator.

In later stages there will be a de-emphasis on independence and objectivity and more emphasis on credibility and usefulness. It should be noted that each school is unique and, therefore, the kinds of services are tailored to the needs of each school.

In other stages, the data provided by the local school evaluator are selected primarily in terms of their usefulness. The data provided are objective, but the way they are selected may be based on subjective judgment. Therefore, the data provided by the local school evaluator are rated high in usefulness and rated medium in objectivity.

During the design phase, when a specific instructional treatment is developed, the local school evaluator is not directly involved. This kind



A local school evaluator can function in this stage by helping the classroom teacher formulate behavioral objectives. This may be a logical extension of needs assessment, and it is essential in designing instructional plans.

Another example of the local school evaluator activity may be presenting information about different types of criterion-referenced tests and their usages for classroom instruction.

Data provided at this stage are highly useful, since the local school evaluator responds to the unique needs of the school. The information is usually very objective. Since the local school evaluator is independent from the major operations of a school program, he/she is moderately credible in providing input evaluation to a local school.

When addressing the question, "Is it operating as planned?", the local school evaluator strives to provide the program implementors with useful information. This is possible because the evaluator is monitoring the important process activities (rated by school staff). Although the data provided are objective, the selection of the dimensions to be monitored may be subjective. Independence at this stage is de-emphasized. Monitoring the implementation of a program is an activity of the local school evaluator. However, quite often the school system does not have the additional resources to respond to such demands. The demand for this service is not so great at this point. A similar constraint limits the role of the local school evaluator in dealing with evaluation of end results.

The local school evaluator is not directly involved with providing data for go-no-go decision; however, the information used for the preceding stages can be used for this purpose.

Usefulness of findings and credibility of the evaluator are maximized by the role of the local school evaluator, although independence and objectivity may not be maximized to the same degree.



Independent Program Evaluator. The independent program evaluator in the Cincinnati Public Schools conducts evaluation of federally funded or state funded programs. These programs are always administered from another department and quite often the coordinators are school based. Although this person performs many functions during the course of the project, the main emphasis is product evaluations.

The independent program evaluator usually is not involved during the initial stages of project development. Although assistance is given by a person with evaluation skills, this person is not necessarily the independent program evaluator that will continue working on the project once the program is accepted by the funding agency.

Once the independent project evaluator is assigned to a particular project, he/she checks the evaluation design and modifies it when necessary. The main emphasis is on prespecified process and product objectives.

Independence in both cases is built into this role by physical location of independent program evaluator and his/her direct reporting relationships.

The independent project evaluator reports to the coordinator of Program Evaluation rather than directly to the project coordinator.

The intent of providing projects with process and product information is to give them feedback so that modifications can be made.

This information is also used to satisfy the funding agency's expectation for a formal evaluation. At times this information is used to influence key decision-makers when making a go-no-go decision. However, this is an indirect function of the independent program evaluator.

The independence of the independent program evaluator maximizes the objectivity of the findings in both process and product evaluation. However, quite often this is not the key factor that actually influences the operation of the project. In this case we sacrifice usefulness and credibility of the information to maintain our objectivity and independence.



The benefits derived from independent program evaluators can be improved by developing sound working relationships with the key people of the various projects. Some techniques used to do this are more site visits, more interim communication and monthly or bi-monthly meetings.

In summary, the independent project evaluator's role has been defined to stress objectivity and independence. At times, these attributes have not contributed directly to enanges in project behavior. This is largely due to the lack of relationships with project staff. There has been an attempt in the Program Evaluation Branch of the Cincinnati Public Schools to maintain the objectivity and independence characteristics and at the same time build better relationships with project staff.

External Evaluator. The external evaluator provides information on the generalizability of federally funded projects in the Cincinnati Public Schools. The purpose of the external evaluator is to provide insight into the impact of a program and to provide key decision-makers with information to determine the future of a project. Rather than responding to the specific objectives of the project, this evaluator responds to the impact questions of key decision-makers. This evaluator's function is not directed toward program improvement but rather toward answering questions related to the impact of the project on students, school, school system and community. This type of evaluation is intended to occur during the final year of a project. During the process, the evaluator has little or no contact with field staff.

The continuation of a project is dependent on this critical stage, since major expenditures of hard money could be an outcome of this evaluation. The data rust be objective. The external evaluator's role is highly independent, since the external evaluator has little or no contact with project personnel. The usefulness of this report is limited to the May decision-makers making the go-no-go decision.



Although this is a concept that has been used in Cincinnati Public Schools, project funds are usually not available for this type of function. Secondly, key decision-makers are relying more heavily on evaluation reports of independent program and project evaluators.

Educational Accomplishment Auditor. An educational accomplishment auditor was utilized on those Title III, section 306 projects which included funds for an external audit. The audit was contracted with a regional university. The auditor and project manager attended the United States Office of Education training session which outlined the role of the auditor. The purpose of an educational accomplishment audit is to provide an objective and independent verfication of a project's evaluation process, to assess the appropriateness of the projects procedure for evaluating product, to assess the appropriateness of management procedures, and to verify the accuracy of the projects evaluation report.

The auditor is typically not involved in the identification of the problem or the treatment. He/she conducts a pra-audit of the project evaluation plan. The pre-audit can contain recommendations for strengthening the design, improving instruments, or improving data collection. During a project year, the auditor conducts one or two site visits to assess the implementation of the evaluation plan. During these visits the auditor interviews the project coordinator, evaluator, staff members, and other individuals in the setting served by the project.

The auditor makes recommendations on project management and evaluation, particularly in those areas covered by specific "program management objectives". The greater part of the auditor's time is spent on validating the evaluation of the outcome objectives of the project. The auditor identifies problem areas but makes no suggestions on program modifications. In some cases the auditor has provided a reaction to program modification prepared by the project coordinator.



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The final audit report is prepared as a supplement to the annual evaluation report. The auditor discusses his findings with the project staff after the document has been completed.

The auditor's role is defined so that his objectivity and independence are maximized. The auditor is constrained, however, to deal with the objectives of the project, and the evaluation of those objectives. In cases where the objectives of the project are inadequate, the auditor's impact on the project is weakened. The relatively small amount of "on-site" experience reduces the credibility and potential usefulness of his recommendations in the area of project management. To the extent that the problems are widely accepted by the staff, as problems, the recommendations can be useful.

Summary

The Department of Research and Development of the Cincinnati Public Schools utilizes five evaluation roles: project evaluator, local school evaluator, independent program evaluator, external evaluator, and external auditor. Each evaluation role would like to produce objective, independent, credible, and useful evaluations. However, in practice, all of the above characteristics cannot be maximized at any one time. The safeguards which insure credibility and independence are much concerned with the relationship between the evaluator and the user. The role definition of the evaluator within the organization also greatly affects these two characteristics. On the other hand, the safeguards which insure objectivity and usefulness are concerned with the quality of the data provided and the responsiveness of the data to the particular user's needs.



REFERENCES

- Alkin, M. C. "Evaluation Theory Development." Evaluation Comment, 1969, 2, 1-7.
- Bernstein, I. N., should evaluation researchers have an inferiority complex. A paper presented at the American Educational Researchers Association Meeting, New Orleans, 1973.
- House, E. R. "The Conscience of Evaluation." Teacher's College Record, 1973, 3, 405-444.
- Husek, T. R. "Different Kinds of Evaluation and Their Implication for Test Development." <u>Evaluation Comment</u>, 1969, 2, 8-11.
- Johnson, G. H. "The Purpose of Evaluation and the Role of the Evaluator."

 <u>Bureau of Educational Research Pipeline</u>, 1971.
- kniefel, T. M., a formative-summative evaluation design for a state-sponsored program of educational experiment. A paper presented at the American Educational Researchers Association Meeting, New Orleans, 1973.
- Metzner, C. A. and Gurin, G. <u>Personal Response and Social Organization in a Health Campaign</u>. Research series #9, Ann Arbor, 1960.
- Papay, J. P. and Costello, R. J. "An Applied Model for Project Evaluation Within Larger School Systems." Educational Technology, 1974, 14.
- Stufflebeam, D. L., (et.al.). Educational Evaluation and Decision Making.
 Ithaca: F.E. Peacock Inc., 1971.
- Suchman, E. A. Evaluation Research. New York: Russel Sage Foundation, 1967.

